

1410 North Hilton . Boise, Idaho 83706 . (208) 373-0502

James E. Risch, Governor Toni Hardesty, Director

August 2, 2006

Certified Mail No. 7005 1160 0000 1550 4861

Darrell Buffaloe Idaho State University, Physical Plant 749 E. Humbolt, Building No. 18 Pocatello, ID 83209

RE:

Facility ID No. 005-00029, Idaho State University, Pocatello

Final Tier II Operating Permit Letter

Dear Mr. Buffaloe:

The Department of Environmental Quality (DEQ) is issuing Tier II Operating Permit No. T2-030317 for Idaho State University located in Pocatello, in accordance with IDAPA 58.01.01.400 through 406, Rules for the Control of Air Pollution in Idaho (Rules).

The enclosed Tier II operating permit is based on the information contained in your permit application and on the relevant comments received during the public comment period. This Tier II permit is effective immediately and replaces your previous permit issued on June 6, 1997. Please note that this permit expires five years after the issuance date.

In accordance with IDAPA 58.01.01.407, DEQ has assessed the emissions for this permit and determined that a Tier II processing fee of \$10,000 will be due. A fee invoice will be sent to you from the DEQ fiscal office shortly.

A representative of the Pocatello Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Dan Pitman at (208) 373-0500 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator

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Air Quality Division

MB/CZ/bf

Permit No. T2-030317

Enclosure

Idaho State University, Pocatello Final Tier II, August 2, 2006 Page 2

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Fiscal Of 1410 N. I	partment of Environmental Quality fice – Air Quality Hilton, Boise, ID 83706-1255 Enclosed: \$	Check No.:				
DEPAR	MENT USE ONLY:	· · · · · · · · · · · · · · · · · · ·				
Facility	Idaho State University	Facility ID:	005-00029			
Project	Tier II operating permit renewal	Permit No.:	T2-030317			
rroject	Fee Tier II Processing Fee \$ 10,000,00					
Fee Type:		Fee Amount:	\$ 10,000.00			
Fee Type:		Amount:	\$ 10,000.00			

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c: Pete Wagner, Pocatello Regional Office
Carole Zundel, Permit Writer
Dan Pitman, Permit Coordinator
Marilyn Seymore/Pat Rayne, Air Quality
Laurie Kral, EPA Region 10
Joan Lechtenberg, Public Comment
Source File
Permit Binder
Dave Sande, Fiscal (Ltr Only)
Phyllis Heitman (Ltr Only)
Reading File (Ltr Only)



Air Quality TIER II OPERATING PERMIT and

PERMIT TO CONSTRUCT

State of Idaho Department of Environmental Quality

PERMIT No.: T2-030317

FACILITY ID No.: 005-00029

AQCR: 061

CLASS: SM80

SIC: 8221

ZONE: 12

UTM COORDINATE (km): 383, 4746

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Idaho State University, Physical Plant

2. PROJECT

Tier II Operating Permit Renewal

3. MAILING ADDRESS 749 E. Humbolt, Building No. 18	CITY Pocatello	STATE ID	ZIP 83209
4. FACILITY CONTACT Darrell Buffaloe	TITLE Director, Physical Plant	TELEPHONE (208) 282-2209	
5. RESPONSIBLE OFFICIAL Darrell Buffaloe	TITLE Director, Physical Plant	TELEPHONE (208) 282-2209	
6. EXACT PLANT LOCATION 749 E. Humbolt, Building No. 18		COUNTY Bannock	

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS University

8. PERMIT AUTHORITY

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.400, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

Only the terms and conditions pertaining to Tier II operating permit requirements are subject to the expiration date of this permit.

The permit to construct conditions in this permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (DEQ) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to DEQ review in accordance with Section 58.01.01.200 of the Rules for the Control of Air Pollution in Idaho.

TON! HARDESTY, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED:

August 2, 2006

DATE EXPIRES:

August 2, 2011

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Acronyms, Units, and Chemical Nomenclatures

AQCR Air Quality Control Region
CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency

gr/dscf grains (1 lb = 7,000 grains) per dry standard cubic foot

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

km kilometer

lb/hr pound per hour

MMBtu/hr million British thermal units per hour

NAAQS National Ambient Air Quality Standards

NO_x nitrogen oxides

O&M Operation and Maintenance

PM particulate matter

PM₁₀ particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PTC permit to construct

SIC Standard Industrial Classification

SM synthetic minor

SM80 synthetic minor with emissions of 80% or more of the major source threshold value

SO₂ sulfur dioxide T/yr tons per year

UTM Universal Transverse Mercator

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T2-030317						
	The State Heisenster		Date Issued:	August 2, 2006		
Permittee:	Idaho State University	Facility ID No. 005-00029				
Location:	749 E. Humbolt, Pocatello		Date Expires:	August 2, 2011		

1. TIER II OPERATING PERMIT SCOPE

Purpose

- 1.1 The purpose of this Tier II operating permit and permit to construct is to:
 - · Renew the existing Tier II operating permit
 - Incorporate PTC No. P-050306, issued November 1, 2005, for Boiler No. 4
 - Supersede PTC No. P-020328, issued January 13, 2004, for a pathological waste incinerator
 - Permit a baghouse on Boiler No. 2
 - Write permit limits for Boilers No. 1 and No. 3 to limit operation as a part of facility-wide NAAQS compliance demonstration
 - Add permit condition to prohibit coal usage in Boiler No. 2 during an air pollution episode
- 1.2 This permit replaces the following permits, the terms and conditions of which no longer apply:
 - PTC No. P-050306, issued November 1, 2005
 - PTC No. P-020328, issued January 13, 2004
 - PTC No. 005-00029, issued November 16, 1999 for an ash barrel
 - Tier II Operating Permit No. 005-00029, issued June 6, 1997

Regulated Sources

1.3 Table 1.1 lists all sources of regulated emissions in this permit.

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T2-030317						
Permittee:	Idaho State University		Date Issued:	August 2, 2006		
1 climitee:	Latio State Oniversity	Facility ID No. 005-00029				
Location:	749 E. Humbolt, Pocatello		Date Expires:	August 2, 2011		

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
3	Boiler No. 2 Manufacturer: Babcock & Wilcox Co. Model: H-1329 Burner type: Dry bottom Rating: 23 MMBtu/hr Fuel type: Coal	Baghouse Manufacturer: Staclean Diffuser Co. Efficiency: 99.9% for PM & PM ₁₀
4	Incinerator Manufacturer: National Incinerator Model: 2H46M Incinerator type: Dual chamber Burner type: Axial firing Waste retention time: 60 minutes Rated heating capacity: 1.6 MMBtu/hr Max. hourly combustion rate: 0.8 MMBtu/hr Fuel type: Natural gas	None
5	Boiler No. 1 (Backup or standby boiler) Manufacturer: Babcock & Wilcox Co. Model: H-1329 Burner type: Horizontally fired Rating: 32.05 MMBtu/hr Fuel type: Natural gas	None
5	Boiler No. 3 Manufacturer: Superior Model: Not available Burner type: Horizontally fired Rating: 26.92 MMBtu/hr Fuel type: Natural gas	None
6	Boiler No. 4 Manufacturer: Keystone Model: Victory Rating: 60,000 lb steam/hr - 72.84 MMBtu/hr Fuel type: Natural gas	Coen low-NO _x burner

Other Sources

1.4 Table 1.2 identifies all other air pollution emitting sources at the facility that do not require specific permit conditions to demonstrate compliance with applicable air quality standards.

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T2-030317						
Permittee:	Title Garage Victoria		Date Issued:	August 2, 2006		
	Idaho State University	Facility ID No. 005-00029				
Location:	749 E. Humbolt, Pocatello		Date Expires:	August 2, 2011		

	Source Description	
Boiler B8	Boiler B9	Boiler B10
Manufacturer: Monitor	Manufacturer: Cleaver Brooks	Manufacturer: Monitor
Model: M723-40	Model: CB 80 HP	Model: M723-60
Rating: 1.674 MMBtu/hr	Rating: 2.678 MMBtu/hr	Rating: 2.511 MMBtu/hr
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Boiler B11	Boiler B12	Boiler B13
Manufacturer: Pacific National	Manufacturer: Sellers	Manufacturer: National BD
Model: PS-60GS	Model: 77 Commodore	Model: H2-2100A-CEBRCAG
	Rating: 3.348 MMBtu/hr	
Rating: 2.677 MMBtu/hr		Rating: 2.1 MMBtu/hr
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Boiler B14	Boiler B15	Boiler B16
Manufacturer: Laars	Manufacturer: National	Manufacturer: Smith
Model: LC-2871	Model: 10-66	Model: N95-1075
Rating: 2.87 MMBtu/hr	Rating: 2.25 MMBtu/hr	Rating: 3.844 MMBtu/hr
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Boiler B17	Boiler B18	Boiler B19
Manufacturer: Weil McLain	Manufacturer: Weil McLain	Manufacturer: Not available
Model: LGB series 1	Model: MGB-8	Model: Not available
Rating: 1.3 MMBtu/hr	Rating: 1.19 MMBtu/hr	Rating: 0.299 MMBtu/hr
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Boller B20	Boiler B21	Boiler B22
Manufacturer: Not available	Manufacturer: HydroTherm	Manufacturer: Raypak
Model: 211-20-WT-1	Model: AM300	Model: Not available
	Rating: 0.299 MMBtu/hr	Rating: 0.726 MMBtu/hr
Rating: 3.0 MMBtu/hr	, –	
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Kiln K23	Kiln K24	Burnoff Furnace F25
Rating: 0.0028 MMBtu/hr	Rating: 0.1 MMBtu/hr	Manufacturer: Johnson burner
Fuel type: Natural gas	Fuel type: Natural gas	Rating: 0.2 MMBtu/hr
		Fuel type: Natural gas
Melting Furnace F26	Boiler B27	Boiler B28
Manufacturer: Pyramid burner	Manufacturer: Crane	Manufacturer: Crane
Rating: 0.1 MMBtu/hr	Model: 66A series	Model: Sunnydale 302
Fuel type: Natural gas	Rating: 1.75 MMBtu/hr	Rating: 0.525 MMBtu/hr
,	Fuel type: Natural gas	Fuel type: Natural gas
Boiler B29	Boiler B30	Boiler B31
Manufacturer: Laars	Manufacturer: Laars	Manufacturer: A. O. Smith
Model: NB33854	Model: NB 33978	Model: TW225V-942
Rating: 0.5 MMBtu/hr	Rating: 0.5 MMBtu/hr	Rating: 0.225 MMBtu/hr
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Boiler B32	Boiler B33	Boiler B34
Manufacturer: A. O. Smith	Manufacturer: Lochinvar Corp.	Manufacturer: Lochinvar Corp.
Model: BT365A BBO	Model: CHN2070	Model: CFN0990PM
Rating: 0.365 MMBtu/hr	Rating: 20.7 MMBtu/hr	Rating: 0.832 MMBtu/hr
Fuel type: Natural gas	Fuel type: Natural gas	Fuel type: Natural gas
Boiler B35	Emergency Generator No. 1	Emergency Generator No. 2
Manufacturer: A. O. Smith	Manufacturer: Intermountain Power	Manufacturer: Spectrum
Model: BTC197970/BTC275973	Model: Generac 2000	Model: 400DS60
Rating: 0.275 MMBtu/hr	Burner type: Not available	Burner type: Not available
Fuel type: Natural gas	Rating: 0.539 MMBtu/hr	Rating: 1.38 MMBtu/hr
· · · · · · · · · · · · · · · · · · ·	Fuel type: Natural gas	Fuel type: No. 1 or No. 2 fuel oil
Emergency Generator No. 3	Emergency Generator No. 4	Art Department Ash Barrel
Manufacturer: Generator No. 3	Manufacturer: Kohler	Burns wood chips and paper
	Model: 60REOZJB	
Model: Generac6.8GN		Burns less than 100 lb/hr and 1,000 lb/yr
Burner type: Not available	Burner type: Not available	Located 100 meters from property line
Rating: 0.884 MMBtu/hr	Rating: 4.154 MMBtu/hr	1
Fuel type: Natural gas	Fuel type: No. 1 or No. 2 fuel oil	1

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T2-030317						
Permittee:	Idaho State University		Date Issued:	August 2, 2006		
1 ci mittee.	Idaio Saio Sin Gistay	Facility ID No. 005-00029				
Location:	749 E. Humbolt, Pocatello		Date Expires:	August 2, 2011		

2. FACILITY-WIDE CONDITIONS

Fugitive Emissions

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:
 - Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
 - Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
 - Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose
 and vent the handling of dusty materials. Adequate containment methods should be employed during
 sandblasting or other operations.
 - Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne
 dusts.
 - Paving of roadways and their maintenance in a clean condition, where practical.
 - Prompt removal of earth or other stored material from streets, where practical.
- 2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
- 2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
- 2.4 The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each quarterly fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (If observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Odors

2.5 No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

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Permittee:	Idaho State University		Date Issued:	August 2, 2006		
Location:	749 E. Humbolt, Pocatello	Facility ID No. 005-00029	Date Expires:	August 2, 2011		
Lucation:	749 E. Huttiooit, I ocaterio		Date Expires:	August 2, 2011		

2.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Visible Emissions

- 2.7 The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.
- The permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each quarterly visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Excess Emissions

2.9 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

Open Burning

2.10 The permittee shall comply with the requirements of the Rules for Control of Open Burning, IDAPA 58.01.01.600-616.

Performance Testing

2.11 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T2-030317						
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Location:	749 E. Humbolt, Pocatello	· -	Date Expires:	August 2, 2011		

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

Monitoring and Recordkeeping

The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

Reports and Certifications

Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, notifications of intent to test, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit, with the exception of a Portable Equipment Registration and Relocation form, shall be submitted to the following address:

Air Quality Permit Compliance Department of Environmental Quality Pocatello Regional Office 444 Hospital Way, #300 Pocatello, ID 83201

Phone: (208) 236-6160 Fax: (208) 236-6168

AIR QUALITY TIER II OPERATING PERMIT NUMBER: T2-030317					
Permittee:	Idaho State University		Date Issued:	August 2, 2006	
1 ct mittee.	idano state omversity	Facility ID No. 005-00029			
Location:	749 E. Humbolt, Pocatello		Date Expires:	August 2, 2011	

Obligation to Comply

2.14 Receiving a Tier II operating permit shall not relieve any owner or operator of the responsibility to comply with all applicable local, state, and federal rules and regulations.

Fuel-burning Equipment

2.15 The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

Sulfur Content

- 2.16 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:
 - ASTM Grade 1 fuel oil 0.3% by weight.
 - ASTM Grade 2 fuel oil 0.5% by weight.
 - ASTM Grades 4, 5 and 6 fuel oil 1.75% by weight.
- 2.17 The permittee shall not sell, distribute, use, or make available for use, any coal containing greater than 1% sulfur by weight.
- 2.18 The permittee shall maintain documentation of supplier verification of distillate fuel oil/coal sulfur content on an as-received basis.

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Location:	749 E. Humbolt, Pocatello	Facility ID No. 005-00029	Date Expires:	August 2, 2011	

3. BOILER NO. 2

3.1 Process Description

Boiler No. 2 is a 23 MMBtu/hr coal-fired boiler used to supply steam to the facility.

3.2 Emission Control Description

Particulate emissions from Boiler No. 2 are controlled by a baghouse.

Table 3.1 BOILER NO. 2 DESCRIPTION

Emissions Unit(s) / Process(es)	Emissions Control Device
Boiler No. 2	Baghouse

Emissions Limits

3.3 <u>Emission Limits</u>

The SO₂ and NO_X emissions from the Boiler No. 2 stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 BOILER NO. 2 EMISSIONS LIMITS

Source Description	SO ₂ NO ₃			
Source Description	lb/hr	Т/уг	lb/hr	T/yr
Boiler No. 2	47.7	94.9	32.6	56.2

3.4 Particulate Emissions Limits

PM emissions from the Boiler No. 2 stack shall not exceed 0.100 grains per dry standard cubic foot (corrected to 8% oxygen) when burning coal as required in IDAPA 58.01.01.677. PM emissions from the Boiler No. 2 stack shall not exceed 0.015 grains per dry standard cubic foot (corrected to 3% oxygen) when burning gas as required in IDAPA 58.01.01.677.

3.5 Opacity

Visible emissions from the common stack (Boiler No. 1 and Boiler No. 2 exhaust through the same stack) shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as determined by procedures contained in IDAPA 58.01.01.625.

Operating Requirements

3.6 Coal Sulfur Content

Coal burned shall not contain sulfur in exceedance of 0.9% by weight.

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3.7 Coal Throughput Limit

Boiler No. 2 shall burn no more than 3,854 tons of coal per any consecutive 12-month period.

3.8 Hourly Steam Production Limit, Coal

Boiler No. 2 shall produce no more than 23,000 pounds of steam per hour when burning coal.

3.9 Natural Gas Throughput Limit

Boiler No. 2 shall burn no more than 32.5 million standard cubic feet of natural gas per any consecutive 12-month period.

3.10 Baghouse Operating Requirement

The permittee shall use a baghouse to control PM₁₀ emissions from Boiler No. 2 when burning coal.

3.11 Baghouse Pressure Drop

The permittee shall install, operate, and maintain a device to measure the pressure drop across the baghouse. The pressure drop shall be maintained within manufacturer's and Operation and Maintenance (O&M) Manual specifications. Documentation of the operating pressure drop specifications for the baghouse shall remain onsite at all times and shall be made available to DEQ representatives upon request.

3.12 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have developed an O&M manual for the baghouse on Boiler No. 2, which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the baghouse. The manual shall include the specification for the acceptable pressure drop range. This manual shall remain onsite at all times and shall be made available to DEO representatives upon request.

Monitoring and Recordkeeping Requirements

3.13 Coal Throughput

The permittee shall monitor and record the amount, in tons, of coal burned by Boiler No. 2 each month and for the most recent 12-month period.

3.14 Sulfur Content

The permittee shall monitor, or the supplier shall verify, the maximum sulfur content by weight of the coal each time coal is introduced into the coal storage bunkers. This information shall be recorded each time coal is introduced into the coal storage bunkers.

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3.15 Steam Production Rate

The permittee shall monitor and record the steam production rate, in pounds per hour, of Boiler No. 2.

3.16 Date and Time of Coal Burning

The permittee shall record the date and time for the following in accordance with Permit Condition 3.20:

- DEQ notifies ISU that a burn ban has been initiated,
- Boiler No. 2 stops burning coal after received the notification,
- DEQ notifies ISU is able to switch back to coal,
- ISU resumes burning coal after the notification is received.

3.17 Natural Gas Throughput

The permittee shall monitor and record the amount, in million standard cubic feet, of natural gas burned by Boiler No. 2 each month and for the most recent 12-month period.

3.18 Pressure Drop Monitoring

The permittee shall monitor and record the pressure drop across the baghouse once per week, when operating.

Reporting Requirements

3.19 Monthly Reports

- 3.19.1 The permittee shall record, in a monthly report, the information required to be monitored and recorded by Permit Conditions 3.13 and 3.14.
- 3.19.2 The permittee shall maintain a monthly report containing the information required to be monitored and recorded by Permit Conditions 3.15 and 3.16 of this permit.
- 3.19.3 The reports required by Permit Conditions 3.19.1 and 3.19.2 shall be maintained on file by the permittee for the most recent five year period and made available to DEQ representatives upon request.

3.20 Air Pollution Episode

If PM_{10} reaches 70 μ g/m³ or greater for a 24 hour average DEQ will notify the ISU boiler room [weekdays 282-2209 or weekends 282-2696], that a burn ban has been initiated, and ISU shall switch from burning coal to natural gas within two hours of receiving the call. When 24-hour average falls below 70 μ g/m³, DEQ will again notify the ISU boiler room when they are able to switch back to coal.

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4. PATHOLOGICAL WASTE INCINERATOR

4.1 Process Description

The purpose of the incinerator is to incinerate preserved animal tissue and cadavers which were used for educational purposes. The incinerator is designed as a two-stage system with a primary combustion chamber and a secondary combustion chamber.

4.2 <u>Emission Control Description</u>

Emissions are controlled by the secondary combustion chamber.

Emissions Limits

4.3 Particulate Emission Limit

No person shall allow, suffer, cause or permit any incinerator to discharge more than 0.2 pounds of particulates per 100 pounds of refuse burned.

[PTC Condition]

4.4 Opacity Limit

Emissions from the incinerator stack, or any other stack, vent, or functionally equivalent opening associated with the incinerator, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[PTC Condition]

4.5 Control of Odors

No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

[PTC Condition]

Operating Requirements

4.6 Material Incinerated

The incinerator shall be used to incinerate pathological waste only. Pathological waste is defined as waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material and animal bedding (if applicable).

[PTC Condition]

4.7 Throughput Limits

The maximum throughput of the incinerator shall not exceed 500 pounds per batch or 75 tons per any consecutive 12-month period. The average burn rate shall not exceed 100 pounds per hour per batch.

[PTC Condition]

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4.8 Continuous Temperature Monitor

A continuous temperature monitoring and recording device shall be operated for the secondary combustion chamber. A compilation of the most recent five years of temperature records shall be kept on site and shall be made available to DEQ representatives upon request.

[PTC Condition]

4.9 Secondary Chamber Operating Temperature

The secondary combustion chamber shall operate at an average hourly temperature of at least 1600°F for the combustion cycle and for at least ½ hour after the end of the combustion cycle.

[PTC Condition]

Monitoring and Recordkeeping Requirements

4.10 Throughput

The permittee shall record the amount, in pounds, and type of material charged into the incinerator for each batch incinerated. The permittee shall record the time that each batch was charged into the incinerator and the period of time set for the combustion cycle. The permittee shall calculate the average amount of material burned per hour for each batch using the combustion cycle time and the total weight of material burned per batch. Each month, the permittee shall compile the records of the amount of material charged into a rolling sum for the most recent 12-month period. A compilation of the most recent five years of records shall be kept on site and shall be made available to DEQ representatives upon request.

[PTC Condition]

4.11 Odor Complaints

The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken. A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

[PTC Condition]

4.12 Operations and Maintenance Manual Requirements

Within 60 days after January 13, 2004, the permittee shall have developed and submitted to DEQ an Operation and Maintenance (O&M) manual for the incinerator. The manual shall describe the procedures that will be followed to comply with the manufacturer specifications. A copy of this manual shall remain onsite at all times. A copy of this manual shall also be submitted to the DEQ regional office at the following address:

Air Quality Permit Compliance Department of Environmental Quality Pocatello Regional Office 444 Hospital Way, #300 Pocatello, ID 83201

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BOILER NO. 1 AND BOILER NO. 3

5.1 <u>Process Description</u>

Boiler No. 1 is used only as a backup or standby boiler for steam generation. It shares a common stack with Boiler No. 2, is fired on natural gas, and is rated at 32.05 MMBtu/hr. Boiler No. 3 is used for steam generation, is fired on natural gas, and is rated at 26.92 MMBtu/hr.

5.2 <u>Emission Control Description</u>

The emissions from the boilers are uncontrolled. Although Boiler No. 1 and No. 2 share the same stack, the baghouse that controls particulate emissions from Boiler No. 2 does not control emissions from Boiler No. 1.

Emissions Limits

5.3 Particulate Emissions Limits

PM emissions from the Boiler No. 1 stack or the Boiler No. 3 stack shall not exceed 0.015 grains per dry standard cubic foot (corrected to 3% oxygen) when burning gas as required in IDAPA 58.01.01.677.

5.4 Opacity

Emissions from the common stack (Boiler No. 1 and No. 2) or from Boiler No. 3, or any other stack, vent, or functionally equivalent opening associated with the Boilers No. 1, 2, or 3, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

5.5 Natural Gas Throughput Limit

Boiler No. 1 shall burn no more than 75.4 million standard cubic feet of natural gas per any consecutive 12-month period.

Boiler No. 3 shall burn no more than 173 million standard cubic feet of natural gas per any consecutive 12-month period.

Monitoring and Recordkeeping Requirements

5.6 Natural Gas Throughput

The permittee shall monitor and record the amount, in million standard cubic feet, of natural gas burned by Boiler No. 1 and Boiler No. 3, individually, each month and for the most recent 12-month period.

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BOILER NO. 4

6.1 Process Description

Boiler No. 4 is used to heat the Rendezvous building on the Idaho State University campus and is fired on natural gas.

[PTC Condition]

6.2 Emissions Control Description

Table 6.1 BOILER DESCRIPTION

Emissions Unit(s) / Process(es)	Emissions Control Device
Boiler No. 4 Manufacturer: Keystone	Coen low-NO _x burner
Model: Victory Rating: 60,000 lb steam/hr - 72.84 MMBtu/hr	!
Fuel: Natural gas	

Emissions Limits

6.3 Emissions Limits

The carbon monoxide (CO) emissions from the Boiler No. 4 stack shall not exceed 7.2 pounds per hour (lb/hr).

[PTC Condition]

6.4 Grain Loading Limit

The permittee shall not discharge to the atmosphere from the Boiler No. 4 stack PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas in accordance with IDAPA 58.01.01.676.

[PTC Condition]

6.5 Opacity Limit

Emissions from the Boiler No. 4 stack, or any other stack, vent, or functionally equivalent opening associated with Boiler No. 4, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[PTC Condition]

Operating Requirements

6.6 Throughput Limits

The amount of natural gas used by Boiler No. 4 shall not exceed 468 million standard cubic feet (MMscf) per any consecutive 12-month period.

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6.7 Fuel Type

Boiler No. 4 shall be fueled on natural gas exclusively.

[PTC Condition]

Monitoring and Recordkeeping Requirements

6.8 Throughput Monitoring

The permittee shall monitor and record the amount of natural gas combusted in Boiler No. 4 as specified in 40 CFR 60.48.c(g). In addition, the permittee shall monitor and record the amount of natural gas combusted in Boiler No. 4 each month and for the most recent 12-month period. Records of this information shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

[PTC Condition]

6.9 Performance Test

The permittee shall conduct a performance test to measure CO emissions from Boiler No. 4 within 180 days of commencement of operation of the boiler. The performance testing will be conducted to demonstrate compliance with the emission rate limit listed in Permit Condition 6.3.

The performance test shall be performed in accordance with IDAPA 58.01.01.157. The fuel type and amount to Boiler No. 4 and the steam production in pounds per hour (lb/hr) shall be recorded during the performance test.

[PTC Condition]

6.10 Compliance Test Protocol

The permittee is strongly encouraged to submit a test protocol to DEQ for approval at least 30 days prior to the compliance test required in Permit Condition 6.9. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the test does not satisfy the testing requirements.

[PTC Condition]

6.11 Compliance Test Report

The permittee shall submit a report of the results of the compliance test required in Permit Condition 6.9, including all required process data, to DEQ within 30 days after the date on which the stack sampling is concluded.

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6.12 Address

Any correspondence to the EPA shall be sent to:

US EPA Region 10 1200 Sixth Avenue Seattle, WA 98101

Any correspondence to the DEQ shall be sent to:

Idaho Department of Environmental Quality Pocatello Regional Office 444 Hospital Way #300 Pocatello, ID 83204

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7. SUMMARY OF EMISSION RATE LIMITS

Table 7.1 provides a summary of all emission rate limits required by this permit.

Table 7.1 SUMMARY OF EMISSION RATE LIMITS

ldaho State University, Pocatello Emission Limits ^a – Hourly (lb/hr) and Annual ^b (T/yr)					
Source Description	NO,		SO ₂		CO
	lb/hr	T/yr	lb/hr	T/yr	lb/hr
Boiler No. 2	32.6	56.2	29.9	51.6	
Boiler No. 4		-		***	7.2

As determined by a pollutant-specific EPA reference method, a DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

permit analysis.

^b As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

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8. TIER II PERMIT GENERAL PROVISIONS

- 1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.
- 2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
- 3. The permittee shall allow the director, and/or his authorized representative(s), upon the presentation of credentials:
 - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and
 conditions of this permit, to inspect any monitoring methods required in this permit, and require stack
 compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the
 Director.
- 4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- 5. In the event of any change in control or ownership of source(s) covered by this permit, the permittee and succeeding owner or controller shall notify the Director of the change in ownership. Any proposed change(s) or modification(s) to this permit by the succeeding owner or controller shall be requested in accordance with the Rules for the Control of Air Pollution in Idaho.
- 6. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
- 7. The Director may require the permittee to develop a list of operation and maintenance procedures to be submitted to DEQ. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
- 8. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.